Amendments to the Claims

1. *(Currently Amended)*   Radio telecommunication apparatus incorporating a baseband processor (18) for transmitting commands to a tunable radio-frequency subsystem (16), the radio-frequency subsystem being designed to convert radio signals into baseband signals and vice-versa, for tuning the radio-frequency subsystem in synchronism with the processing of one signal frame, this baseband processor (18) comprising:

- a memory (42) to store a list of events wherein each event of said list is associated with an absolute event time field indicating at which time from the beginning of the frame processing the event should be executed,

- an interface (40) with the radio-frequency subsystem, designed to execute each event of said list of events in order to transmit to the radio-frequency subsystem the corresponding command, each event being executed during the frame processing at a time corresponding to the value of the associated absolute event time field, and

- a calculator (70) to compute and store said list of events in the memory,

wherein the baseband processor further comprises:

- a storage unit (72) storing:

- a descriptor table comprising for each descriptor:

. a pointer field to point to a definition of an operation to be carried out by said interface during the frame processing,

. an absolute operation time field indicating at which time from the beginning of the frame processing the corresponding operation should be carried out by said interface,

- an operation definition table comprising for each operation a definition of the operation, each definition having a sequence of events to be executed by the interface in order to carry out said operation, each event of the definition table being associated with a relative event time field indicating at which time from the beginning of the operation the corresponding event should be executed, and

wherein said calculator is designed to automatically compute said list of events from the description and operation tables.

2. *(Currently Amended)*   Radio telecommunication apparatus incorporating baseband processor according to claim 1, wherein:

- the storage unit (72) further comprises a data table having parameter values,

- at least one definition of the operation definition table has an event associated with an unknown parameter value,

- each descriptor which comprises a pointer field pointing to an operation definition, definition of which comprises an event associated with an unknown parameter value is associated with a parameter value of the data table, and

- the calculator replaces the unknown parameter value in a definition with the parameter value associated with the descriptor comprising a pointer field pointing to this definition, in order to compute said list of events.

3. . *(Currently Amended)* Radio telecommunication apparatus according to ~~any one of the preceding claims~~claim 1, wherein:

- the memory ~~(44)~~ comprises a non-dedicated random access memory which is connected to the calculator ~~(70)~~ and to the interface ~~(40)~~ through a shared memory access bus ~~(46)~~,

- the calculator stores the list of events in said memory using the shared memory access bus, and

- the interface reads the list of events in said memory using the shared memory access bus.

4. . *(Currently Amended)* The baseband processor according to ~~claim 2 or 3~~claim 2, wherein the interface ~~(40)~~ reads the list of events using direct memory access technologies ~~(DMA)~~.

5. . *(Currently Amended)* The baseband processor according to ~~any one of the preceding claims~~claim 1, wherein the calculator ~~(70)~~ comprises:

- a main processor ~~(74)~~ programmed to update the description table in the storage unit ~~(72)~~ in order to tune the radio-frequency subsystem for the processing of the next frame, and

- a coprocessor ~~(76)~~ associated with the main processor, the coprocessor being able to compute said list of events form the stored tables in the storage unit.

6. . *(Currently Amended)* A baseband processor ~~(18)~~ for transmitting commands to a tunable radio-frequency subsystem ~~(16)~~, the radio-frequency subsystem being designed to convert radio signals into baseband signals and vice-versa, in order for tuning the radio-frequency subsystem in synchronism with the processing of one signal frame, this baseband processor ~~(18)~~ comprising:

- a memory (42) to store a list of events wherein each event of said list is associated with an absolute event time field indicating at which time from the beginning of the frame processing the event should be executed,

- an interface (40) with the radio-frequency subsystem, designed to execute each event of said list of events in order to transmit to the radio-frequency subsystem the corresponding command, each event being executed during the frame processing at a time corresponding to the value of the associated absolute event time field, and

- a calculator (70) to compute and store said list of events in the memory,

wherein the baseband processor further comprises:

- a storage unit (72) storing:

- a descriptor table comprising for each descriptor:

. a pointer field to point to a definition of an operation to be carried out by said interface during the frame processing,

. an absolute operation time field indicating at which time from the beginning of the frame processing the corresponding operation should be carried out by said interface,

- an operation definition table comprising for each operation a definition of the operation, each definition having a sequence of events to be executed by the interface in order to carry out said operation, each event of the definition table being associated with a relative event time field indicating at which time from the beginning of the operation the corresponding event should be executed, and

wherein said calculator is designed to automatically compute said list of events from the description and operation tables.

7. *(Original)*   A method for transmitting commands to a tunable radio-frequency subsystem, the radio-frequency subsystem being designed to convert radio signals into baseband signals and vice-versa, in order to tune the radio-frequency subsystem in synchronism with the processing of a signal frame, the method comprising the steps of:

- recording in a memory a list of events wherein each event of said list is associated with an absolute event time field, the absolute event time field indicating at which time from the beginning of the frame processing the event should be executed,

- executing each event of said list of events in order to transmit corresponding commands to the radio-frequency subsystem, each event being executed, during the frame processing, at a time corresponding to the value of the associated absolute event time field,

- computing and storing said list of events in the memory, and

wherein the method further comprises:

    - recording in a storage unit a descriptor table comprising for each descriptor:

     . a pointer field designed to point to a definition of an operation to be carried out by said interface during the frame processing,

     . an absolute operation time field indicating at which time from the beginning of the frame processing the corresponding operation should be carried out by said interface,

    - an operation definition table comprising for each operation a definition of the operation, each definition having a sequence of events to be executed by the interface in order to carry out said operation, each event of the definition table being associated with a relative event time field indicating at which time from the beginning of the operation the corresponding event should be executed, and

    - automatically computing said list of events from the descriptor and operation tables.

8. . *(Currently Amended)* A storage unit (72) intended to be used in a baseband processor according to claim 6, wherein the storage unit comprises:

    - a descriptor table comprising for each descriptor:

     . a pointer field to point to a definition of an operation to be carried out by said interface during the frame processing,

     . an absolute operation time field indicating at which time from the beginning of the frame processing the corresponding operation should be carried out by said interface,

    - an operation definition table comprising for each operation a definition of the operation, each definition having a sequence of events to be executed by the interface in order to carry out said operation, each event of the definition table being associated with a relative event time field indicating at which time from the beginning of the operation the corresponding event should be executed.